Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method comprising:

~~identifying a plurality of nodes which form a communication path between a source and a destination, wherein the plurality of nodes includes a first node and a second node~~;

receiving, at ~~the~~ a first node of a selected plurality of nodes forming a communication path between a source and a destination, a signal from the source, wherein the signal is part of a signal stream comprising a plurality of signals which are received at a rate of one signal per time interval;

identifying, based at least in part on a communication rate ~~bandwidth~~ between the first node and ~~the~~ a second node, a second time interval, wherein the second time interval occurs ~~within the time interval following~~ after receipt of the signal; and

transmitting the signal from the first node to the second node without a buffering delay, wherein the signal is transmitted during the second time interval.

2. (Canceled).

3. (Currently Amended) A system comprising:

a first node and a second node along a communication path between a source and a destination, wherein the first node is configured to receive a signal from the source, wherein the signal is part of a signal stream comprising a plurality of signals which are received at a rate of one signal per time interval; and

a connection manager configured to identify, based at least in part on a ~~bandwidth~~ communication rate between the first node and the second node, a second time interval, wherein the second time interval occurs ~~within the time interval following~~ after receipt of the signal,

wherein the first node is further configured to transmit the signal to the second node during the second time interval and without a buffering delay.

4. (Currently Amended) The system of claim 3, further comprising a first unidirectional virtual dedicated circuit connection and a second unidirectional virtual dedicated circuit connection, wherein the first unidirectional virtual dedicated circuit connection and the second unidirectional virtual dedicated circuit connection are used to form the communication path.

5. (Previously Presented) The system of claim 3, wherein the connection manager is further configured to multiplex the signal with one or more additional signals to form a multiplexed signal, and further wherein the multiplexed signal is transmitted from the first node to the second node during the second time interval.

6. (Currently Amended) A system comprising:

a first Internet connected node and a second Internet connected node, wherein the first Internet connected node is configured to receive a signal from a source, and further wherein the signal is part of a signal stream comprising a plurality of signals which are received by the first Internet connected node at a rate of one signal per time interval; and,

a connection manager configured to:

identify a communication path between the source and a destination, wherein the communication path includes the first Internet connected node and the second Internet connected node; and

identify, based at least in part on a communication rate ~~transmission link bandwidth~~, a second time interval ~~within the time interval following~~ after receipt of the signal, wherein the first Internet connected node is configured to transmit the signal to the second Internet connected node during the second time interval without a route calculation delay, and further wherein the second Internet connected node is configured to transmit the signal to a third Internet connected node along the communication path during the second time interval and without the route calculation delay.

7. (Currently Amended) The system of claim 6, wherein the first Internet connected node includes a first unidirectional virtual dedicated circuit connection and the second Internet connected node includes a second unidirectional virtual dedicated circuit connection.

8. (Previously Presented) The system of claim 6, wherein the signal is transmitted by the first Internet connected node and the second Internet connected node without a buffering delay.

9. (Previously Presented) The system of claim 6, wherein said signal further comprises multiplexed data from a second source.

10. (Previously Presented) The method of claim 1, further comprising interleaving data with the signal, wherein the data is received from a second source at the first node.

11. (Currently Amended) The method of claim 1, wherein the communication path includes a first unidirectional virtual dedicated circuit connection and a second unidirectional virtual dedicated circuit connection.

12. (Previously Presented) The system of claim 3, wherein said signal further comprises multiplexed data from a second source.